ORIGINAL OPERATING INSTRUCTIONS

POT 10 theodolite

It is essential that the operating instructions are read before the tool is operated for the first time.

Always keep these operating instructions together with the tool.

Ensure that the operating instructions are with the tool when it is given to other persons.

These numbers refer to the illustrations. You can find the illustrations at the beginning of the operating instructions.

In these operating instructions, the designation “the tool” always refers to the POT 10 theodolite.

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1 General information

1.1 Safety notices and their meaning

DANGER
Draws attention to imminent danger that will lead to serious bodily injury or fatality.

WARNING
Draws attention to a potentially dangerous situation that could lead to serious personal injury or fatality.

CAUTION
Draws attention to a potentially dangerous situation that could lead to slight personal injury or damage to the equipment or other property.

NOTE
Draws attention to an instruction or other useful information.

1.2 Explanation of the pictograms and other information

Symbols

Read the operating instructions before use.

General warning

Symbol for Laser Class II / Class 2

Laser class 2 in accordance with EN 60825-1:2003

2 Description

2.1 Description of the tool

The Hilti POT 10 theodolite is designed for measuring horizontal and vertical angles, 90° angles, inclinations in %, the alignment of control lines over great distances (up to 200 m) and for transferring control lines over several building floor levels. The tool is equipped with horizontal and vertical circles with digital graduation and an electronic level (single-axis compensator) for precise measurement of vertical angles and inclinations.

2.2 Items supplied with the standard version

1 Theodolite
1 AC adapter incl. charging cable for chargers
1 Charger
1 3.8 V 5200 mAh Li-ion battery
1 Adjusting set
1 Operating instructions
1 Hilti toolbox

3 Description of the tool

3.1 General terms

3.1.1 Control lines

Height marks and control lines are generally marked out on and around the building plot by a surveyor before construction begins.
Two ends are marked on the ground for each control line. These marks are used to position the individual components of the building or structure. Large buildings require a number of control lines.

### 3.1.2 Technical terms

#### Tool axes

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Target axis</td>
</tr>
<tr>
<td>b</td>
<td>Vertical axis</td>
</tr>
<tr>
<td>c</td>
<td>Trunnion (tilt axis)</td>
</tr>
</tbody>
</table>

#### Horizontal circle / horizontal angle

The included angle of $70^\circ - 40^\circ = 30^\circ$ can be calculated from the horizontal circle readings of $70^\circ$ to one target and $40^\circ$ to the other target.
Vertical circle / vertical angle

As the vertical circle can be aligned at 0° to the direction of gravity or at 0° to horizontal, angles can be determined relative to the direction of gravity, so to speak.

### 3.2 Telescope positions

The term “telescope position” is used to ensure that readings from the horizontal circle can be correctly assigned to the vertical angle, i.e. the position of the telescope relative to the control panel determines in which “position” the measurements have been taken.

- When the tool appears as shown in this view, this is described as “telescope position 1”.
- When the tool appears as shown in this view, this is described as “telescope position 2”.

### 3.3 Terms and their description

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target axis</td>
<td>A line through the cross hairs and center of the objective lens (telescope axis).</td>
</tr>
<tr>
<td>Trunnion</td>
<td>The telescope pivot (tilt) axis.</td>
</tr>
<tr>
<td>Vertical axis</td>
<td>The pivot axis of the entire tool.</td>
</tr>
<tr>
<td>Zenith</td>
<td>The zenith is the point that lies in the direction of gravity, but in the opposite, upward direction.</td>
</tr>
<tr>
<td>Horizon</td>
<td>The horizon is the direction perpendicular to the direction of gravity, generally known as horizontal.</td>
</tr>
<tr>
<td>Nadir</td>
<td>Nadir is the name given to the downward direction in which gravity acts.</td>
</tr>
<tr>
<td>Vertical circle</td>
<td>The vertical circle is the circle of angles described by the telescope when it is tilted upwards or downwards.</td>
</tr>
<tr>
<td>Vertical direction</td>
<td>A reading taken from the vertical circle is known as the vertical direction.</td>
</tr>
<tr>
<td>Vertical angle (VA)</td>
<td>A vertical angle is a reading from the vertical circle. The vertical circle is usually aligned with the direction of gravity with the aid of the compensator, with the zero point at the zenith.</td>
</tr>
<tr>
<td>Elevation angle</td>
<td>An elevation angle of zero refers to the horizon (horizontal plane). Positive angles are above horizontal (upwards) and negative angles are below horizontal (downwards).</td>
</tr>
<tr>
<td>Horizontal circle</td>
<td>The horizontal circle is the complete circle of angles described by the tool when it is rotated.</td>
</tr>
<tr>
<td>Horizontal direction</td>
<td>A reading taken from the horizontal circle is known as the horizontal direction.</td>
</tr>
</tbody>
</table>
A horizontal angle is the difference between two readings from the horizontal circle. However, a reading from one of the circles is also often described as an angle.

The rotatable center part of the theodolite is known as the alidade. This part usually carries the control panel, bubble levels for leveling and, inside, the horizontal circle.

The tool stands on the tribrach which, for example, can be mounted on a tripod. The tribrach has three points of contact which can be adjusted vertically by adjusting screws.

This is the point at which the tool is set up - usually over a point marked on the ground.

### 3.4 Angle measurement system

An electronic reading system is used for vertical and horizontal circle readings.

#### 3.4.1 Measuring principle

The tool provides a reading from one of the circles.

The included angle is the difference between two readings from a circle.

#### 3.4.2 Single-axis compensator

Tool tilt in the direction of the telescope is corrected with the aid of the electronic level (compensator). This ensures that vertical angle and inclination are always relative to the vertical or horizontal plane. The single-axis compensator measures tool tilt in the direction of the telescope, i.e., in the target direction. This ensures that residual inclination has no influence on vertical angle measurement.

### 3.5 Control panel

The control panel features a display and a total of 6 buttons each marked with a symbol.
<table>
<thead>
<tr>
<th>Button</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool ON / OFF.</td>
<td></td>
</tr>
<tr>
<td>Backlight on / off.</td>
<td></td>
</tr>
<tr>
<td>Change the direction for horizontal circle angle measurement.</td>
<td></td>
</tr>
<tr>
<td>Hold the horizontal circle reading currently displayed.</td>
<td></td>
</tr>
<tr>
<td>Set the current horizontal angle to “0”.</td>
<td></td>
</tr>
<tr>
<td>Switch between degrees and % when displaying the vertical circle value.</td>
<td></td>
</tr>
<tr>
<td>Battery symbol for indication of charge status.</td>
<td></td>
</tr>
<tr>
<td>The extent to which the battery symbol is “filled” indicates the state of battery charge. When the battery is virtually completely discharged, the last segment of the battery symbol and the symbol itself disappear. There is then no further power available for taking measurements.</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>The current reading from the vertical circle</td>
</tr>
<tr>
<td>H</td>
<td>The current reading from the horizontal circle.</td>
</tr>
<tr>
<td>R or L</td>
<td>Indication of the current measuring direction with the horizontal circle to the right (clockwise) or left (counterclockwise).</td>
</tr>
</tbody>
</table>
4 Insert tools, accessories

<table>
<thead>
<tr>
<th>Power source</th>
<th>Illustration</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>POA 80 battery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POA 81 AC adapter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POA 82 charger</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tripod</th>
<th>Illustration</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PUA 35 tripod</td>
</tr>
</tbody>
</table>

5 Technical data

Right of technical changes reserved.

Telescope

<table>
<thead>
<tr>
<th>Telescope magnification</th>
<th>30x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortest target distance</td>
<td>1.5 m (4.9 ft)</td>
</tr>
<tr>
<td>Telescope angle of view</td>
<td>1° 30'; 2.8 m / 100 m (7.9 ft / 300 ft)</td>
</tr>
<tr>
<td>Objective aperture</td>
<td>45 mm</td>
</tr>
</tbody>
</table>

Compensator

<table>
<thead>
<tr>
<th>Type</th>
<th>Single-axis, liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working range</td>
<td>±3'</td>
</tr>
<tr>
<td>Accuracy</td>
<td>5&quot;</td>
</tr>
</tbody>
</table>

Angle measurement

<table>
<thead>
<tr>
<th>POT 10 accuracy (DIN 18723)</th>
<th>5&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle reading system</td>
<td>V (incremental)</td>
</tr>
<tr>
<td>Angle reading system</td>
<td>Hz (absolute)</td>
</tr>
</tbody>
</table>
Laser plummet

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>1.5 mm at 1.5 m (1/16 at 3 ft)</td>
</tr>
<tr>
<td>Power</td>
<td>&lt; 1 mW</td>
</tr>
<tr>
<td>Laser class</td>
<td>Class 2</td>
</tr>
</tbody>
</table>

Display

<table>
<thead>
<tr>
<th>Type</th>
<th>Segment display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>Single-stage</td>
</tr>
</tbody>
</table>

Tubular bubble level

<table>
<thead>
<tr>
<th>Tubular bubble level</th>
<th>30&quot; / 2mm</th>
</tr>
</thead>
</table>

IP protection class

<table>
<thead>
<tr>
<th>Class</th>
<th>IP 55</th>
</tr>
</thead>
</table>

Tripod thread

<table>
<thead>
<tr>
<th>Tribrach thread</th>
<th>5/8&quot;</th>
</tr>
</thead>
</table>

POA 80 battery

<table>
<thead>
<tr>
<th>Type</th>
<th>Li-ion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>3.8 V</td>
</tr>
<tr>
<td>Charging time</td>
<td>4 h</td>
</tr>
</tbody>
</table>

Temperature

| Operating temperature range | -20...+50°C (-4°F...+122°F) |
| Storage temperature range   | -30...+70°C (-22°F...+158°F) |

Dimensions and weights

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>164 mm x 154 mm x 340 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>4.6 kg</td>
</tr>
</tbody>
</table>

Angle units

<table>
<thead>
<tr>
<th>DMS, GON</th>
</tr>
</thead>
</table>

6 Safety instructions

6.1 Basic information concerning safety

In addition to the information relevant to safety given in each of the sections of these operating instructions, the following points must be strictly observed at all times.

6.2 Misuse

The tool and its ancillary equipment may present hazards when used incorrectly by untrained personnel or when used not as directed.

- Never use the tool without having received the appropriate instruction on its use or without having read these operating instructions.
- Do not render safety devices ineffective and do not remove information and warning notices.
- Have the tool repaired only at a Hilti Service Center. Failure to follow the correct procedures when
opening the tool may cause emission of laser radiation in excess of class 2.

d) Modification of the power tool or tampering with its parts is not permissible.

e) To avoid the risk of injury, use only genuine Hilti accessories and additional equipment.

f) Do not use the tool in areas where there is a danger of explosion.

g) Use only clean, soft cloths for cleaning. If necessary, they may be moistened with a little alcohol.

h) Keep laser tools out of reach of children.

i) Do not point the tool toward the sun or other powerful light sources.

j) Do not use the tool as a level.

k) Check the tool before taking important measurements or after it has been dropped or subjected to mechanical effects such as impact or vibration.

6.3 Proper organization of the work area

a) Observe the accident prevention regulations applicable in your country.

b) Avoid hard impacts or strong vibration.

c) High temperature fluctuations will cause condensation to form on the objective lens. The tool should thus be allowed to acclimatize before use.

d) The tool should not be exposed to the heat of the sun for long periods.

e) Remove the battery if the tool is to remain unused for a long period of time. Leaking batteries may damage the tool.

f) After use, the tool should be stored in its toolbox in a dry state.

g) The bubble levels should be checked at regular intervals by reversing their position and readjusted if necessary.

6.4 Electromagnetic compatibility

Although the tool complies with the strict requirements of the applicable directives, Hilti cannot entirely rule out the possibility of the tool - causing interference to other devices (e.g. aircraft navigation equipment) or being subject to - interference caused by powerful electromagnetic radiation, leading to incorrect operation.

Check the accuracy of the tool by taking measurements by other means when working under such conditions or if you are unsure.

6.4.1 Laser classification

The laser plummet incorporated in the tool conforms to laser class 2 based on the IEC825-1 / EN60825-01:2008 standard and class II based on CFR 21 § 1040 (FDA).

The eyelid closure reflex protects the eyes when a person looks into the beam unintentionally for a brief moment. This eyelid closure reflex, however, may be negatively affected by medicines, alcohol or drugs. This tool may be used without need for further protective measures. Nevertheless, as with the sun, one should not look directly into sources of bright light. Do not direct the laser beam toward persons.

6.5 General safety rules

a) Check the tool for damage before use. If the tool is found to be damaged, have it repaired at a Hilti service center.

b) Check the accuracy of the tool after it has been dropped or subjected to other mechanical stresses.

c) When the tool is brought into a warm environment from very cold conditions, or vice-versa, allow it to become acclimatized before use.

d) When a tripod is used, check that the tool is securely mounted (screwed on) and that the tripod stands securely on solid ground.

e) Keep the laser exit aperture clean to avoid measurement errors.

f) Although the tool is designed for the tough conditions of jobsite use, as with other optical and electronic instruments (e.g. binoculars, spectacles, cameras) it should be treated with care.

g) Although the tool is protected to prevent entry of dampness, it should be wiped dry each time before being put away in its transport container.

h) As a precaution, check the previous settings or any adjustments you may have made.

i) View the tool at an angle when setting it up with the aid of the circular bubble level.

j) Secure the battery compartment cover carefully in order to ensure that the battery cannot fall out and that no contact can occur which would result in the tool being switched off inadvertently, possibly resulting in loss of data.

6.6 Transport

The battery must be insulated or removed from the tool before the tool is shipped or sent by mail. Leaking batteries may damage the tool.

To avoid pollution of the environment, the tool and the battery must be disposed of in accordance with the currently applicable national regulations.

Consult the manufacturer if you are unsure of how to proceed.
7 Before use

7.1 Charging the battery
After unpacking the tool, remove the AC adapter, charger and battery from their holders.
Charge the battery for approx. 4 hours.

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POA 80 battery</td>
</tr>
<tr>
<td></td>
<td>POA 81 AC adapter</td>
</tr>
<tr>
<td></td>
<td>POA 82 charger</td>
</tr>
</tbody>
</table>

7.2 Inserting the battery
Insert the charged battery into the tool with the battery connector underneath and facing the tool.
Secure the battery compartment cover carefully.

7.3 Initializing the vertical circle
After setting up the tool in accordance with the described procedure, the vertical circle of the tool must be initialized.
Tilt the telescope slowly about the trunnion (c) until an angle reading for vertical measurement is displayed.

7.4 Checking functions
NOTE
Please note that the locking knobs must be released before the tool can be pivoted about the alidade.
The horizontal and vertical drives also allow fine adjustment but must first be locked.
Check the functions of the tool before initial use and at regular intervals in accordance with the following criteria:
1. Release the locking knobs.
2. Rotate the tool carefully by hand to the left and right and tilt the telescope up and down to check that the parts move smoothly.
3. Lock the horizontal and vertical drives and then turn the horizontal and vertical motion knobs carefully in both directions.
4. Turn the focussing ring fully to the left.
5. Lock through the telescope and turn the eyepiece ring to bring the cross hairs into focus.
6. With a little practice you can check the two optical sights on the telescope to ensure that they are in alignment with the object targeted by the cross hairs.
7. Check that the screws on the carrying handle are tight.
8. See section: 7.3 Initializing the vertical circle

7.5 Setting up the tool
7.5.1 Setting up over a point on the ground
The tool is equipped with a laser plummet that is switched on and off together with the background light (if the tool is already switched on).
7.5.2 Setting up the tool

1. Set up the tripod with the center of the tripod head approximately over the point marked on the ground.
2. Mount the tool on the tripod (tighten the screw).
3. Move two of the tripod legs with your hands until the laser beam strikes the mark on the ground.
   NOTE Take care to ensure that the tripod head remains approximately horizontal.
4. Then press the points of the tripod legs into the ground by applying pressure with your foot.
5. Adjust the foot screws to eliminate any deviation of the laser point from the mark on the ground. The laser point must then be exactly in the center of the mark on the ground.
6. The circular bubble level can be centered by adjusting the tripod legs.
   NOTE This is done by extending or retracting the leg at the opposite side of the tripod, depending on the direction in which the bubbles is to be moved. This process may have to be repeated several times until the desired result is achieved.
7. Once the circular bubble level has been centered, align the laser plummet exactly with the mark on the ground by shifting the position of the tool laterally on the tripod plate.
8. Following this, position the tubular bubble level parallel to two foot screws and center the bubble.
9. Rotate the tool through 90° and, with the aid of the third foot screw, center the bubble. Then rotate the tool again through 90° and readjust with the foot screws if necessary until the bubble is centered.

7.5.3 Setting up over a pipe using the laser plummet

Pipes are often used to mark points on the ground. In this case, the laser beam is projected into the pipe and the point cannot be seen.

Lay a piece of paper, plastic foil or other semi-translucent material on the pipe in order to make the laser point visible.

8 Operation

8.1 Measuring using the horizontal circle

8.1.1 Zeroing before reading from the horizontal circle

The horizontal circle can be zeroed at any time by pressing the 0-SET button, thereby setting the reference point for the horizontal circle.

8.1.2 Changing the direction of angle measurement with the horizontal circle

The direction of measurement for horizontal angles can be switched between right (clockwise) and left (counterclockwise) by pressing the R/L button.
On the display, this is indicated by the letter R (for right) or the letter L (for left) which appears below the letter H. When the tool is switched on, the direction of measurement is set as standard to right (clockwise).

### 8.1.3 Setting the horizontal circle display

The reading from the horizontal circle can be held by pressing the **HOLD** button, the tool then aimed at the new target and the reading from the horizontal circle released by pressing the button again.

**NOTE**
On the display, the letter H and, below this, the letters RL blink while the circle reading is held.

### 8.2 Measuring using the vertical circle

#### 8.2.1 Indication of inclination

Readings from the vertical circle can be shown in the display in degrees or in percent (%).

**NOTE**
Readings can be shown in % only for this function.

This allows inclinations to be measured in % or objects aligned accordingly.
Measurement of inclinations in % is possible only within the ±100% range, i.e. ±45°.
No measurements are possible above or below this range - no value will be displayed.
Press the V% button to switch between degrees and percent % for readings from the vertical circle.

### 9 Settings

#### 9.1 Displaying the settings menu

To access the settings menu, the tool must be switched off.
Press and hold the Hold button and the 0-Set button simultaneously. Then also press the “on” button and keep it pressed until all segments are visible in the display. Release the Hold and 0-Set buttons after four beeps are heard. The tool is then in the mode in which settings can be made.

Press the Hold button to switch between various settings. Press the 0-Set button to switch between the various settings parameters. Press the V% to confirm and save the settings and to leave the settings mode. The tool is then in normal operating (measuring) mode.

### 9.2 Setting the audible angle indicator for each quadrant

There is an audible indicator for each quadrant or, respectively, every 90°/100Gon.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>ON</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Display: 90 bEEP</td>
<td>Display: NO bEEP</td>
</tr>
</tbody>
</table>

### 9.3 Angle units

Changing the angle units for circle readings
9.4 Setting the zenith

Setting the zenith (reference position) for readings from the vertical circle

<table>
<thead>
<tr>
<th>Zenith</th>
<th>Display: ZEN==0</th>
</tr>
</thead>
<tbody>
<tr>
<td>at 0° (upwards)</td>
<td>ZEN==0</td>
</tr>
<tr>
<td>at 90° (rear)</td>
<td>ZEN==90</td>
</tr>
</tbody>
</table>

9.5 Activating / deactivating automatic power-off

Activating / deactivating the tool's automatic power-off feature

<table>
<thead>
<tr>
<th>Possible settings</th>
<th>Display: NO OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Display: NO OFF</td>
</tr>
<tr>
<td>Automatic power-off after 30min</td>
<td>Display: 30 OFF</td>
</tr>
</tbody>
</table>

9.6 Setting display resolution for the angle measurement system

Setting display accuracy
### 9.7 Switching the compensator on / off

Switching the compensator on / off

<table>
<thead>
<tr>
<th>Possible settings</th>
<th>1° Display: dSP 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5° Display: dSP 5</td>
</tr>
<tr>
<td></td>
<td>10° Display: dSP 10</td>
</tr>
</tbody>
</table>

### 9.8 Calibration / adjustment of the vertical circle

The tool is correctly adjusted when supplied. The values to which the tool is set may change over time or due to temperature fluctuations, transport or aging. The tool therefore incorporates a feature that allows the settings to be checked and, if necessary, corrected by carrying out an in-the-field re-calibration.

This is done by setting up the tool securely on a tripod of good quality and targeting an easily visible, clearly discernible object within ±3 degrees of horizontal at a distance of approx. 70 – 120 m.

#### 9.8.1 Starting the calibration procedure

The tool must be switched on before calibration can be started.

1. Press and hold the R/L button and the Hold buttons simultaneously and then press the ON/OFF button.
2. Wait until all characters appear in the display and then release the R/L and Hold buttons first.
3. Target the selected object exactly.

4. Wait until the V-angle display is steady.

5. Then press the OSET button to take the angle measurement at position 1.
   The display then changes, requesting that the measurement is taken at position 2.

6. Now go to position 2 and target the selected object at this position.

7. Press the OSET button to take the angle measurement at position 2.
   After the second measurement, the correction for the vertical circle is calculated, saved in the tool, and the current angle then displayed.

8. Confirm this result by taking the measurements to the target object again in both positions.
   **NOTE** The vertical circle is correctly calibrated when the sum of the two V-angles (position 1 and position 2) is 360°.
10 Calibration and adjustment

10.1 Hilti Calibration Service
We recommend that the tool is checked by the Hilti Calibration Service at regular intervals in order to verify its reliability in accordance with standards and legal requirements.

Use can be made of the Hilti Calibration Service at any time, but checking at least once a year is recommended.

The Calibration Service provides confirmation that the tool is in conformance, on the day it is tested, with the specifications given in the operating instructions.

The tool will be readjusted if deviations from the manufacturer’s specification are found.

After checking and adjustment, a calibration sticker applied to the tool and a calibration certificate provide written verification that the tool operates in accordance with the manufacturer’s specification.

Calibration certificates are always required by companies certified according to ISO 900x. Your local Hilti Center or representative will be pleased to provide further information.

11 Care and maintenance

NOTE

Have damaged parts replaced by Hilti Service.

11.1 Cleaning and drying
Blow any dust off the glass.

CAUTION
Do not touch the glass surfaces with your fingers.

Use only a soft, clean cloth to clean the tool. If necessary, the cloth may be moistened with a little pure alcohol or water.

CAUTION
Do not use liquids other than alcohol or water. Other liquids may damage plastic parts.

NOTE
Have damaged parts replaced.

11.2 Storage

NOTE
Do not put the tool into storage when wet. Allow it to dry before putting it away.

NOTE
Always clean the tool, its transport container and accessories before putting them into storage.

NOTE
Check the accuracy of the equipment before it is used after a long period of storage or transportation.

CAUTION
Remove the battery if the tool is to remain unused for a long period of time. Leaking batteries may damage the tool.

NOTE
Observe the specified temperature limits when storing your equipment, above all in winter and summer, especially if the equipment is stored in a motor vehicle (-30°C to +70°C (-22°F to +158°F)).

11.3 Transport

CAUTION

The battery must be insulated or removed from the tool before the tool is shipped or sent by mail. Leaking batteries may damage the tool.

Use the Hilti shipping box or packaging of equivalent quality for transporting or shipping your equipment.

12 Troubleshooting

Fault | Possible cause | Remedy
--- | --- | ---
The tool can’t be switched on. | No electric power. | Charge the battery according to instructions.
E01 | Counting error, when the measured value displayed changes constantly when an object is targeted. | The tool needs to be repaired.
TOO FAST | The telescope was pivoted too quickly for the vertical sensor. | Pivot more slowly.
NOTE
If faults cannot be corrected by the troubleshooting procedures listed, the tool must be returned to a Hilti Service Center.

13 Disposal

WARNING
Improper disposal of the equipment may have serious consequences:
The burning of plastic components generates toxic fumes which may present a health hazard.
Batteries may explode if damaged or exposed to very high temperatures, causing poisoning, burns, acid burns or environmental pollution.
Careless disposal may permit unauthorized and improper use of the equipment. This may result in serious personal injury, injury to third parties and pollution of the environment.
If you wish to bring the tool to a recycling facility yourself: Dismantle the tool as far as is possible without need for special tools.

Most of the materials from which Hilti tools or appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, Hilti has already made arrangements for taking back old tools or appliances for recycling. Ask Hilti Customer Service or your Hilti representative for further information.

Separate the individual parts as follows:

<table>
<thead>
<tr>
<th>Part / assembly</th>
<th>Main material</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing</td>
<td>Plastic</td>
<td>Plastics recycling, scrap metal</td>
</tr>
<tr>
<td>Switch</td>
<td>Plastic</td>
<td>Plastics recycling</td>
</tr>
<tr>
<td>Screws, small parts</td>
<td>Steel, aluminium, magnets</td>
<td>Scrap metal</td>
</tr>
<tr>
<td>Electronics</td>
<td>Various</td>
<td>Electronics scrap</td>
</tr>
<tr>
<td>Batteries</td>
<td>Alkaline</td>
<td>National regulations</td>
</tr>
<tr>
<td>Soft pouch</td>
<td>Woven synthetic material</td>
<td>Plastics recycling</td>
</tr>
</tbody>
</table>

For EC countries only

Do not dispose of electronic measuring tools or appliances together with household waste.

In observance of the European Directive on waste electrical and electronic equipment and its implementation in accordance with national law, electrical appliances and batteries that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

Dispose of the batteries in accordance with national regulations. Please help us to protect the environment.

14 Manufacturer’s warranty

Please contact your local Hilti representative if you have questions about the warranty conditions.
15 FCC statement (applicable in US) / IC statement (applicable in Canada)

CAUTION
This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and may radiate radio frequency energy. Accordingly, if not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:
- Re-orient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Consult the dealer or an experienced TV/radio technician for assistance.

NOTE
Changes or modifications not expressly approved by Hilti could void the user’s authority to operate the equipment.

16 EC declaration of conformity (original)

Designation: Theodolite
Type: POT 10
Generation: 01
Year of design: 2010

We declare, on our sole responsibility, that this product complies with the following directives and standards:

Hilti Corporation, Feldkircherstrasse 100, FL-9494 Schaan

Paolo Luccini
Head of BA Quality and Process Management
Edward Przybyłowicz
Head of BU Measuring Systems
Business Area Electric Tools & Accessories

06/2015 06/2015

Technical documentation filed at:
Hilti Entwicklungsgesellschaft mbH
Zulassung Elektrowerkzeuge
Hiltistrasse 6
86916 Kaufering
Deutschland

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